L3: Entry 45 of 86 File: USPT Sep 10, 2002

DOCUMENT-IDENTIFIER: US 6447772 B1
TITLE: Compositions and methods relating to reduction of symptoms of autism

Brief Summary Text (12):
Thus, in one aspect the present invention provides compositions able to reduce the symptoms of autism in a human patient, comprising a physiologically effective amount of a purified casomorphin inhibitor selected from the group consisting of a casomorphinase and a casomorphin ligand, a physiologically effective amount of a purified gluteomorphin inhibitor selected from the group consisting of a gluteomorphinase and a gluteomorphin ligand, and at least one of the group consisting of a physiologically acceptable carrier, adjuvant, excipient, buffer and diluent. In a preferred embodiment, the casomorphinase is a proline protease, further preferably a protease comprising the dipeptidase activity of dipeptidyl peptidase IV. (The present invention comprises multiple aspects, features and embodiments; such multiple aspects, features and embodiments can be combined and permuted in any desired manner.)

Detailed Description Text (14):
A "proline protease" is a protease that cleaves a protein or a peptide on the basis of the presence of a proline amino acid in the sequence of the protein or peptide. "Dipeptidyl peptidase IV" ("DPP IV") is a Dipeptidyl peptidase that cleaves peptides comprising a proline at the penultimate position at the amino-terminus of the peptide. "Handbook of Proteolytic Enzymes," CLAN SC-S9, .sctn.128, p. 378-382 (Academic Press, Barrett, et al., eds., 1998). Similarly, a "tyrosinase" is a protease that cleaves, oxidizes and/or reduces a protein on the basis of a tyrosine in the protein. "Phenylalaninase" is an example of another exomorphinase, which cleaves, oxidizes and/or reduces a protein on the basis of a phenylalanine in the protein.

Detailed Description Text (22):
The compositions of the present invention are preferably administered orally, but may also be administered via other direct routes, such as rectal or, in the case of pharmaceutically designed compositions, via transcutaneous methods such as intraarterial, intramuscular, intraperitoneal, subcutaneous, intraocular, and intravenous. Other routes such as buccal/sublingual, nasal, topical (such as transdermal and hypothalamic), vaginal and pulmonary may also be used, if desired. The compositions are typically administered to human beings, but may also be administered to animals, preferably mammals, displaying symptoms similar to autism.

Other Reference Publication (9):
Krepela E., et al., "Demonstration Of Two Molecular Forms Of Dipeptidyl Peptidase IV In Normal Human Serum," Physiol. Bohemoslov 32(6):486-96 (1983) (Abstract).

CLAIMS:

2. The composition of claim 1 wherein the peptidase comprises a dipeptidase activity of dipeptidyl peptidase IV.

8. The method of claim 7 wherein the peptidase comprises a dipeptidase activity of dipeptidyl peptidase IV.